

TWO-PASS METHOD AND APPARATUS FOR ACHIEVING MAXIMAL DATA COMPRESSION FOR A MODEM RELAY MODE OF OPERATION IN A VOICE FRAME NETWORK

5

ABSTRACT

The present invention is a two-pass method and apparatus for achieving maximal data compression for a voice frame modem relay channel between two endpoint modems. The method includes transitioning the channel from a voice mode to a modem relay mode of operation; negotiating maximal compression parameters for either of two endpoint segments; communicating the same from one segment to the other; and then negotiating maximal end-to-end data compression parameters based upon the negotiated endpoint segment compression parameters. The end-to-end negotiation preferably involves re-negotiating one of the endpoint segments. The apparatus includes a dual first-pass negotiation mechanism for independently determining the maximal data compression capability of each segment; an end-to-end data compression capability determination mechanism for determining the maximal end-to-end data compression capability based upon the independently determined capability of each segment; and a second-pass negotiation mechanism for establishing the determined maximal end-to-end data compression capability for the channel.